

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-02-27 10:50:55
Date of Next Testing: 2025-02-26 10:50:55
Product Name: **Ammonia solution**
CAS Number: 1336-21-6
Specifications & Purity: for HPLC, $\geq 25\%$ in H₂O
Lot #: B2422310
SKU #: **A112080**
Analysis: 323921

Parameter	Limit Values	Result
Germanium (Ge)	0-0.01 (ppm)	0.00 ppm
Indium (In)	0-0.01 (ppm)	0.00 ppm
Stannum (Sn)	0-0.01 (ppm)	0.00 ppm
Magnesium (Mg)	0-0.01 (ppm)	0.00 ppm
Lithium (Li)	0-0.01 (ppm)	0.00 ppm
Titanium (Ti)	0-0.01 (ppm)	0.00 ppm
Potassium (K)	0-0.01 (ppm)	0.00 ppm
Gallium (Ga)	0-0.01 (ppm)	0.00 ppm
Zirconium (Zr)	0-0.01 (ppm)	0.00 ppm
Manganese (Mn)	0-0.01 (ppm)	0.00 ppm
Evaporation Residue concentration (as NH ₃)	0-0.001 (%) 25-100 (%)	0.00 % 50.00 %
Copper (Cu)	0-0.01 (ppm)	0.00 ppm
Chromium (Cr)	0-0.01 (ppm)	0.00 ppm
As, Sb (as As)	0-0.01 (ppm)	0.00 ppm
Nickel (Ni)	0-0.01 (ppm)	0.00 ppm
Vanadium (V)	0-0.01 (ppm)	0.00 ppm
Strontium (Sr)	0-0.01 (ppm)	0.00 ppm
Boron (B)	0-0.01 (ppm)	0.00 ppm
Aurum (Au)	0-0.01 (ppm)	0.00 ppm
Chloride (Cl ⁻)	0-0.2 (ppm)	0.00 ppm
Cobalt (Co)	0-0.01 (ppm)	0.00 ppm
Zinc (Zn)	0-0.01 (ppm)	0.00 ppm
Molybdenum (Mo)	0-0.01 (ppm)	0.00 ppm
Silver (Ag)	0-0.01 (ppm)	0.00 ppm
Bismuth (Bi)	0-0.01 (ppm)	0.00 ppm
Iron (Fe)	0-0.01 (ppm)	0.00 ppm

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Parameter	Limit Values	Result
Platinum(Pt)	0-0.01 (ppm)	0.00 ppm
Calcium(Ca)	0-0.5 (ppm)	0.00 ppm
Sulfate(SO42-)	0-1 (ppm)	0.00 ppm
Cadmium(Cd)	0-0.01 (ppm)	0.00 ppm
Sodium(Na)	0-0.01 (ppm)	0.00 ppm
(Pb)Lead	0-0.01 (ppm)	0.00 ppm
Beryllium(Be)	0-0.01 (ppm)	0.00 ppm
Appearance (A112080)	Colorless Liquid	Colorless liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure

A handwritten signature in black ink that reads "John Su".

John Su
QA & QC Manager